

WHAT IS CLAIMED IS:

1.

A method of lithographic printing comprising the steps of:

- (i) unwinding a web of an imaging material from a supply spool, the imaging material comprising (1) a flexible lithographic base having a hydrophilic surface and (2) an image-recording layer which is removable in a single-fluid ink or can be rendered removable in a single-fluid ink by exposure to heat or light;
- (ii) wrapping the imaging material around a cylinder of a printing press;
- (iii) image-wise exposing the image-recording layer to heat or light;
- (iv) processing the image-recording layer by supplying single-fluid ink, thereby obtaining a printing master;
- (v) printing by supplying single-fluid ink to the printing master which is mounted on a plate cylinder of the printing press; and
- (vi) removing the printing master from the plate cylinder.

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2. The method according to claim 1 wherein the image-recording layer is a non-ablative image-recording layer which is removable with the single-fluid ink before exposure to heat or light and is rendered less removable by exposure to heat or light.

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3. The method according to claim 2 wherein the image-recording layer comprises hydrophobic thermoplastic polymer particles.

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4. The method according to claim 3 wherein the image-recording layer further comprises a hydrophilic binder.

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5. The method according to claim 2 wherein the image-recording layer comprises an aryldiazosulfonate polymer.

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6. The method according to claim 1 wherein the supply spool is located within the plate cylinder.

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7. The method according to claim 1 wherein step (vi) is carried out by winding the printing master on an uptake spool which is located within the plate cylinder.

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8. A method according to claim 1 wherein the flexible lithographic base comprises a plastic support, a thin aluminum support or a laminate of plastic and thin aluminum.

9. The method according to claim 1 wherein the single-fluid ink is an emulsion comprising:

- (a) a continuous phase comprising an acid-functional vinyl resin; and
- (b) a discontinuous phase comprising a liquid polyol.

10. A method according to claim 9 wherein the vinyl resin is a branched acid-functional vinyl resin having a number average molecular weight of between about 1000 and about 15000 and a weight average molecular weight of at least about 100000.